



United States
Department of
Agriculture

Agricultural
Research
Service

Animal
Improvement
Programs
Laboratory

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April 22, 1997

SUBJECT: Electronic Distribution of USDA-DHIA Genetic Evaluations

TO: Executive Secretaries, Breed Associations
Managers, Dairy Records Processing Centers
Sire Analysts, Artificial-Insemination Organizations
State Extension Dairy Specialists Advising on Dairy Cattle Breeding
and the National Cooperative Dairy Herd Improvement Program
Coordinator of Genetic Programs, National Association of Animal Breeders
Other Recipients of Evaluations in Formats 380, 380S, and 105N

FROM: H. D. Norman, Research Leader, AIPL

H. Duane Norman

The Animal Improvement Programs Laboratory's (AIPL's) agreement to provide four genetic evaluations per year was contingent on electronic distribution for nearly all evaluation data. Thus, to reduce costs associated with upkeep and shipment of magnetic media, the internet will be the primary method of distribution for USDA-DHIA genetic evaluations. Details on the electronic transfer of evaluation files for the May 1997 release are outlined in this memorandum. Documentation and memorandums related to May 1997 evaluation information are available through AIPL's web site (<http://aipl.arsusda.gov>).

Transfer for most files will be the same as for February 1997. However, because the bull evaluation and daughter (BEAD) and artificial insemination (AI) organization lists are being provided electronically for the first time, please review the instructions in this memorandum carefully. Also, please note that genetic evaluation data **no longer will be released on magnetic media** except for a few cow evaluation files that still are too large to transmit electronically in a reasonable time. For these exceptions, 3480 and 3490 cartridges, 4- and 8-mm tapes, or ISO 9660 standard CD-ROM's will be used to send the files to breed associations or dairy records processing centers.

Compressed, encrypted, password-protected files will be available at **2 p.m. (e.d.t.), Friday, May 2**. File transfer protocol (FTP) can be used to download any file from <ftp://aipl.arsusda.gov/pub/bulls> and <ftp://aipl.arsusda.gov/pub/cows> any time after the posting. Each file can be unencrypted with a password supplied at **7 a.m. (e.d.t.), Monday, May 5**, in the file <ftp://aipl.arsusda.gov/pub/password>. This password is needed to decompress and to interpret the files.

Other dairy industry organizations also have agreed to serve as additional host (mirror) sites for distribution of files accessible by the general public. Location of these mirror sites can be found in <ftp://aipl.arsusda.gov/pub/sites>. All distribution sites have T1 (or faster) connections to the internet. The **sites** file also contains exact sizes of all evaluation files, and the size listed should be compared with the size of any file downloaded to ensure that a successful transfer has been achieved.

The compression software used to prepare the evaluation files is compatible with recent versions of PKZIP (Phil Katz' ZIP for MS-DOS systems). Files will be converted into PC-compatible form before compression. February 1997 compressed files located in directories <ftp://aipl.arsusda.gov/pub/bulls> and <ftp://aipl.arsusda.gov/pub/cows> have the same characteristics as those to be provided on May 2 and can be used to test transmission and decompression. The eight-character password needed to decompress the February 1997 files is in the current <ftp://aipl.arsusda.gov/pub/password> file (which will be updated for May 1997 files on May 5). Please note that any file with a **.zip** extension must be downloaded with the binary option set in the FTP session.

Evaluation data are provided in several files and formats to accommodate the needs of users. Selecting the smallest file with the information needed will minimize transmission and decompression times. File details are shown in the following table:

Description	File	Pass-word?	Format	No. of records (approx.)	Com-pressed file size (approx.)	Uncom-pressed file size (approx.)	Com-pressed file name	Uncom-pressed file name ¹
USDA-DHIA bull evaluations (ftp://aipl.arsusda.gov/pub/bulls)								
AI bulls used in recent years with ≥ 10 daughters and likely to have semen available	380S	Yes	380S	4,000	235 KB	620 KB	380s.zip	380s.myy
All AI bulls	380AI	Yes	380	41,000	5 MB	18.4 MB	380ai.zip	380ai.myy
All bulls (AI and non-AI)	380ALL	Yes	380	140,000	16.3 MB	60.4 MB	380all.zip	380all.myy
All bulls other than Holsteins and Red & Whites (AI and non-AI)	380COL	Yes	380	27,000	3.2 MB	12 MB	380col.zip	380col.myy
USDA-DHIA cow evaluations (ftp://aipl.arsusda.gov/pub/cows)								
Elite cows and high-ranking grades based on net merit dollars (NM\$) percentile	105NEL	Yes	105N	12,000	1.1 MB	4 MB	105nel.zip	105nel.myy
Top 5% of cows based on NM\$ (registered and grade)	105NHI5	Yes	105N	80,000	8 MB	26 MB	105nhi5.zip	105nhi5.myy
USDA-DHIA herd-owner names and addresses (ftp://aipl.arsusda.gov/pub/cows)								
Herds with Elite cows and high-ranking grades	2NEL	Yes	2N	4,500	120 KB	675 KB	2nel.zip	2nel.myy
Herds with cows among top 5% for NM\$	2NHI5	Yes ²	2N	12,000	300 KB	1.8 MB	2nhi5.zip	2nhi5.myy
International Bull Evaluation Service (INTERBULL) bull evaluations (ftp://aipl.arsusda.gov/pub/bulls)								
Holstein and Red & White bulls ³	031HOL	Yes ⁴	31	50,000	3.6 MB	9.4 MB	031hol.zip	031hol.myy
Bulls other than Holsteins and Red & Whites ³	031COL	Yes ⁴	31	15,000	680 KB	1.8 MB	031col.zip	031col.myy
Bulls with INTERBULL evaluations designated as official	031UPDT	Yes ⁴	31	1,600	80 KB	300 KB	031updt.zip	031updt.myy
Official combined USDA-DHIA and INTERBULL bull evaluations (ftp://aipl.arsusda.gov/pub/bulls)								
Holstein and Red & White bulls	031HOFF	Yes ⁴	31	135,000	5.7 MB	25 MB	031hoff.zip	031hoff.myy
Bulls other than Holsteins and Red & Whites	031COFF	Yes ⁴	31	30,000	1 MB	3.5 MB	031coff.zip	031coff.myy

¹myy = numeric month and year of evaluation release (e.g., 597 indicates a May 1997 release); for November releases, month will be coded as B (e.g., B97 indicates a November 1997 release).

²Password administered by National Dairy Herd Improvement Association.

³Only usability codes, NM\$, and percentiles updated for May and November files.

⁴No password needed in February and August.

Files for specific organizations will be made available on the dedicated server **ftp://ftpaip.arsusda.gov**. All accounts for individual organizations will have passwords so that the appropriate organization has exclusive access to organization-specific files. For AI organizations, the FTP user name is **stud** followed by the AI organization's four-digit NAAB code (e.g., stud0012). For breed associations, the FTP user name is **breed** followed by the two-letter breed code (AY, BS, GU, HO, JE, WW). For dairy records processing centers, the user name is **drpc** followed by the two-letter State code. All users must contact AIPL by **12 noon (e.d.t.), Monday, April 28**, to enable their accounts and to obtain a password.

All May 1997 organization-specific files at **ftp://ftpaip.arsusda.gov** will be located in an **/out** subdirectory. The files will be available in a compressed form (**.zip** extension) at 2 p.m. (e.d.t.), Friday, May 2. For AI organizations, the organization and BEAD lists will be combined in the same compressed file (e.g., **sd0012.zip** will contain **st0012.597** and **bd0012.597**). Decompressed versions of all files will be posted on Monday, May 5. The daughter files (format 105N) will also be available. Individual bull owners without an NAAB organization code will continue to receive BEAD lists through the U.S. postal service. However, any bull owner with an NAAB organization code will be expected to access the information electronically.

For both organization-specific (**ftp://ftpaip.arsusda.gov**) and general access (**ftp://aipl.arsusda.gov**) sites, please download only those files of immediate interest between 2 p.m., Friday, May 2, and 7 a.m., Monday, May 5. All May 1997 files will continue to be available at AIPL's two access sites until the next release of evaluation information in August 1997.

If you have concerns, questions, or need additional information, please contact Leigh Walton (301-504-8026, leighw@ggpl.arsusda.gov) or me (301-504-8660, dnorman@aipl.arsusda.gov) by Friday, April 25.

The final version of this memorandum will be posted on the AIPL web site on Monday, April 28.